## **AMENDMENTS TO THE CLAIMS:**

Please amend claims 1, 33, 35, 37, 44, 46, 48, 54, 59, 62, and 132-133, and add new claims 139-142 as indicated in the following listing of claims, which replaces all prior versions and listings of claims in the application:

## **Listing of Claims:**

1. (Currently Amended) A computer system comprising:

a first database containing records corresponding to a plurality of chemical compounds and records corresponding to biological information related to effects of such chemical compounds on biological systems;

a second database containing records corresponding to a plurality of molecular targets;

a third database containing records corresponding to <u>screening results from</u> tests of interactions between <u>each of a plurality of</u> compounds in the first database and <u>each of a plurality of</u> molecular targets in the second database, the tests including information on the effect that a compound <u>selected</u> from the <u>plurality of compounds</u> <u>first database</u> has on the interaction of a <u>between a reference</u> compound known to interact with a <u>selected</u> molecular target from the <u>plurality of molecular targets</u> and said <u>selected</u> molecular target; and

a user interface allowing a user to view the selected compound and to selectively view information from the first database, the second database, and the third database as it relates to a compound record in the first database or as it relates to a molecular target in the second database.